

Listing of the Claims:

1. (Currently amended) An apparatus for analyzing a sample comprising a probe, the probe comprising a pointed member, the pointed member having a plurality of domains disposed thereon, wherein the domains comprise one or more biomolecules and wherein the domains form an array.
2. (Original) The apparatus of claim 1, wherein the array is a nanoarray.
3. (Currently amended) The apparatus of claim 1, wherein the ~~domains comprise~~ one or more biomolecules are selected from the group consisting of drugs, drug candidates, chemical groups, lipids, DNA, RNA, proteins, peptide species, carbohydrates, and any combination thereof.
4. (Original) The apparatus of claim 1, further comprising nanosensors operably connected to one or more of the domains.
5. (Canceled)
6. (Original) The apparatus of claim 1, wherein the probe is a dual element probe.
7. (Original) The apparatus of claim 1, wherein the probe is a multielement probe.
8. (Previously presented) The apparatus of claim 1, wherein the probe is sized to interrogate a sample comprising a volume of about 50 femtoliters to about 10 microliters.
9. (Previously presented) The apparatus of claim 1, the apparatus comprising at least one microdisrupter disposed on the probe.
10. (Previously presented) The apparatus of claim 9, wherein the microdisrupter comprises the pointed member.
11. (Original) The apparatus of claim 1, wherein the probe further comprises at least one hydrophobic region.
12. (Original) The apparatus of claim 1, further comprising a molecular detection device operably connected to the probe.

13. (Original) The apparatus of claim 12, wherein the molecular detection device is a scanning tunneling microscope, atomic force microscope, mass spectrometer, fluorescence microscope, flow cytometer, Raman spectrometer, Infra-red spectrometer, UV spectrometer, electronic system, electrochemical system, optical system, magnetic and electromagnetic system, or mass measuring system.

14. (Withdrawn) A method of detecting a molecular interaction event comprising:

contacting a sample with the probe of claim 1;

providing an incubation period;

washing unbound molecules from the domains; and

detecting the molecular interaction event.

15. (Withdrawn) The method of claim 14 wherein the sample comprises at least one cell.

16. (Withdrawn) The method of claim 14 wherein the sample comprises at least one cell lysate.

17. (Withdrawn) A method of detecting one or more molecules in a sample comprising:

contacting the sample with the probe of claim 4; and

detecting binding of one or more molecules to one or more of the domains.

18-27. (Canceled)

28. (Previously presented) The apparatus of claim 1, wherein the domains are spatially arranged in known locations.

29. (Previously presented) The apparatus of claim 1, wherein the probe is sized to interrogate a single cell.

30. (Previously presented) The apparatus of claim 1, wherein the probe is sized to interrogate a lysate of a single cell.

31. (Previously presented) The apparatus of claim 1, wherein the probe is sized to interrogate a sub-cellular species of a cell.

32. (Previously presented) The apparatus of claim 31, wherein the sub-cellular species is selected from the group consisting of a Golgi complex, a mitochondria, a lysosome, an endoplasmic reticulum, a lipid raft, and a cytoskeletal system.

33. (Previously presented) The apparatus of claim 1, wherein the pointed member is sized to be inserted into a cell.

34. (Previously presented) The apparatus of claim 1, wherein the pointed member comprises an anti-wicking feature.

35. (Previously presented) The apparatus of claim 34, wherein the anti-wicking feature comprises a hydrophobic domain.

36. (Previously presented) The apparatus of claim 1, wherein at least one domain has a substance reversibly attached thereto.

37. (Previously presented) The apparatus of claim 36, wherein the at least one domain is reversibly attached by a tether, the tether comprising a protease substrate, a photolyzable tether, a chemically reactive tether, an ionically reactive tether, or a thermally sensitive tether.

38. (Withdrawn) A method of delivering at least one substance to a cell, comprising:
passing the pointed member of the probe of claim 36 through the membrane of the cell into the intracellular space; and
releasing the substance into the intracellular space.

39. (Withdrawn) A method of analyzing one or more analytes in a cell, comprising:
passing the pointed member of the probe of claim 1 through the membrane of the cell into the intracellular space; and
detecting the binding of the analyte to the domains of the array.

40. (Withdrawn) The method of claim 39, wherein the array is a nanoarray.

41. (Withdrawn) A method of retrieving an analyte from a cell, comprising:
passing the pointed member of the probe of claim 1 through the membrane of the cell into the intracellular space, wherein the probe has at least one domain capable of binding to the analyte;
and

retrieving the analyte from the domain.

42. (Withdrawn) A method of detecting an *in situ* molecular interaction event comprising:

contacting a sample with the pointed member of the probe of claim 1; and

detecting the molecular interaction event.

43. (New) The apparatus of claim 3 wherein the one or more biomolecule is a drug.

44. (New) The apparatus of claim 3 wherein the one or more biomolecule is a drug candidate.

45. (New) The apparatus of claim 3 wherein the one or more biomolecule is a chemical group.

46. (New) The apparatus of claim 3 wherein the one or more biomolecule is a lipid.

47. (New) The apparatus of claim 3 wherein the one or more biomolecule is DNA.

48. (New) The apparatus of claim 3 wherein the one or more biomolecule is RNA.

49. (New) The apparatus of claim 3 wherein the one or more biomolecule is a protein.

50. (New) The apparatus of claim 3 wherein the one or more biomolecule is a peptide species.

51. (New) The apparatus of claim 3 wherein the one or more biomolecule is a carbohydrate.

52. (New) An apparatus for analyzing a sample comprising a probe, the probe comprising a pointed member, the pointed member having a plurality of domains disposed thereon, wherein the domains form an array and wherein the probe is sized to interrogate a single cell.

53. (New) An apparatus for analyzing a sample comprising a probe, the probe comprising a pointed member, the pointed member having a plurality of domains disposed thereon, wherein the domains form an array and wherein the pointed member is sized to be inserted into a cell.

54. (New) An apparatus for analyzing a sample comprising a probe, the probe comprising a pointed member, the pointed member having a plurality of domains disposed thereon, wherein the domains form an array and wherein at least one domain has a substance reversibly attached thereto reversibly attached by a tether, the tether comprising a protease substrate, a photolyzable tether, a chemically reactive tether, an ionically reactive tether, or a thermally sensitive tether.